

---

**TITLE 326 AIR POLLUTION CONTROL BOARD**

---

**FINDINGS AND DETERMINATION OF THE COMMISSIONER  
PURSUANT TO [IC 13-14-9-8](#) AND DRAFT RULE  
LSA Document #12-510****DEVELOPMENT OF AMENDMENTS TO RULES CONCERNING THE NATIONAL AMBIENT AIR QUALITY STANDARDS FOR NITROGEN DIOXIDE, SULFUR DIOXIDE, PARTICULATE MATTER WITH AN AERODYNAMIC DIAMETER LESS THAN OR EQUAL TO 2.5 MICRONS, AND PARTICULATE MATTER WITH AN AERODYNAMIC DIAMETER LESS THAN OR EQUAL TO 10 MICRONS****PURPOSE OF NOTICE**

The Indiana Department of Environmental Management (IDEM) has developed draft rule language for amendments to Indiana's rules at [326 IAC 1-3-4](#) concerning the national ambient air quality standards for nitrogen dioxide, sulfur dioxide, particulate matter with an aerodynamic diameter less than or equal to 2.5 microns, and particulate matter with an aerodynamic diameter less than or equal to 10 microns. IDEM is also amending [326 IAC 1-4-1](#) to add a definition for particulate matter with an aerodynamic diameter less than or equal to 2.5 microns. IDEM is soliciting written comment on the draft rule language and will schedule a public hearing before the Air Pollution Control Board (board) for consideration of adoption of these rules.

**CITATIONS AFFECTED:** [326 IAC 1-3-4](#); [326 IAC 1-4-1](#).

**AUTHORITY:** [IC 13-14-8](#); [IC 13-17](#).

**STATUTORY REQUIREMENTS**

[IC 13-14-9-8](#) recognizes that, under certain circumstances, it may be appropriate to reduce the number of public comment periods and public hearings usually provided for under the [IC 13-14-9](#) environmental rulemaking process. In cases where the commissioner determines that there is no reasonably anticipated benefit from a second public comment period and first public hearing to either the environment or persons regulated or otherwise affected by the proposed rule, IDEM may forgo these comment periods and proceed directly to the public hearing and board meeting at which the draft rule is considered for adoption. Two opportunities for public comment (with this notice and at the public hearing prior to adoption of the rule) remain under this procedure.

If the commissioner makes the determination of no anticipated benefit required by [IC 13-14-9-8](#), the commissioner shall prepare written findings and publish those findings in the Indiana Register prior to the board meeting at which the draft rule is to be considered for adoption and include them in the board packet prepared for that meeting. This document constitutes the commissioner's written findings pursuant to [IC 13-14-9-8](#).

The statute provides for this shortened rulemaking process if the commissioner determines that:

(1) the rule constitutes:

(A) an adoption or incorporation by reference of a federal law, regulation, or rule that:

(i) is or will be applicable to Indiana; and

(ii) contains no amendments that have a substantive effect on the scope or intended application of the federal law or rule;

(B) a technical amendment with no substantive effect on an existing Indiana rule; or

(C) an amendment to an existing Indiana rule, the primary and intended purpose of which is to clarify the existing rule; and

(2) the rule is of such nature and scope that there is no reasonably anticipated benefit to the environment or the persons referred to in [IC 13-14-9-7\(a\)\(2\)](#) from:

(A) exposing the rule to diverse public comment under [IC 13-14-9-3](#) or [IC 13-14-9-4](#);

(B) affording interested or affected parties the opportunity to be heard under [IC 13-14-9-3](#) or [IC 13-14-9-4](#); and

(C) affording interested or affected parties the opportunity to develop evidence in the record collected under [IC 13-14-9-3](#) and [IC 13-14-9-4](#).

**BACKGROUND**

The Clean Air Act (CAA) requires the United States Environmental Protection Agency (U.S. EPA) to set primary and secondary National Ambient Air Quality Standards (NAAQS) for the six common air pollutants considered harmful to public health and the environment including lead, ground-level ozone, carbon monoxide, nitrogen oxides, sulfur dioxide, and particulate matter. For each of these pollutants, the CAA requires U.S. EPA to set health-based or "primary" standards at a level judged to be "requisite to protect the public health with an adequate margin of safety" and establish secondary standards that are requisite to protect public welfare from "any known or anticipated effects associated with the pollutant in the ambient air" including effects on crops,

vegetation, wildlife, buildings and national monuments, and visibility. The law requires U.S. EPA to review these standards once every five years to determine whether revisions to the standards are appropriate.

In 2010, U.S. EPA issued a revised primary NAAQS for nitrogen dioxide (NO<sub>2</sub>) in the February 9, 2010, Federal Register (FR) published at 75 FR 6474. NO<sub>2</sub> belongs to a family of highly reactive gases called nitrogen oxides. These gases form when fuel is burned at high temperatures and come principally from motor vehicle exhaust and stationary fuel combustion sources such as electric utilities and industrial boilers. NO<sub>2</sub> also plays a major role in the atmospheric reactions that produce ground-level ozone.

U.S. EPA first established standards for NO<sub>2</sub> in 1971, setting both a primary standard to protect health and a secondary standard to protect public welfare at 100 micrograms per cubic meter (µg/m<sup>3</sup>) (53 parts per billion (ppb)), averaged annually. This standard was reviewed by U.S. EPA in 1985 and 1996 and was retained. U.S. EPA then determined that the 1971 primary annual average NO<sub>2</sub> standard of 53 ppb alone was not sufficient to protect public health with an adequate margin of safety. Subsequently, U.S. EPA strengthened the NAAQS for NO<sub>2</sub>, to increase protection of public health, by adding a one-hour NO<sub>2</sub> standard at 100 ppb and retaining the annual average NO<sub>2</sub> standard at 53 ppb on February 9, 2010, at 75 FR 6474. The form used to determine if an area meets the standard is the three year average of the ninety-eighth percentile of the annual distribution of daily maximum one-hour average concentrations.

In this rulemaking, IDEM is proposing to amend [326 IAC 1-3-4](#) to incorporate portions of 40 CFR 50.11 to update its references to the national primary and secondary ambient air quality standards for oxides of nitrogen (with nitrogen dioxide as the indicator). By incorporating these federal regulations, this rulemaking helps to ensure that state rules are consistent with federal rules.

U.S. EPA issued a revised primary NAAQS for sulfur dioxide (SO<sub>2</sub>) in the June 22, 2010, Federal Register published at 75 FR 35520. SO<sub>2</sub> belongs to a group of highly reactive gases known as sulfur oxides. SO<sub>2</sub> is used as the indicator for the larger group of gaseous sulfur oxides. The largest sources of SO<sub>2</sub> emissions are from fossil fuel combustion at power plants and other industrial facilities. Smaller sources of SO<sub>2</sub> emissions include industrial processes, such as extracting metal from ore, and the burning of high sulfur containing fuels by locomotives, large ships, and nonroad equipment.

U.S. EPA first established standards for SO<sub>2</sub> in 1971, setting a 24 hour primary standard at 0.14 parts per million (ppm) and an annual average standard at 0.03 ppm (30 ppb) to protect health. U.S. EPA also set a three hour average secondary standard at 0.5 ppm (500 ppb) to protect public welfare. This standard was last reviewed by U.S. EPA in 1996 and was retained. U.S. EPA then determined that the 1971 24 hour and annual primary standards were not sufficient to protect public health with an adequate margin of safety. Subsequently, U.S. EPA strengthened the NAAQS for SO<sub>2</sub> by establishing a new one-hour standard at a level of 75 ppb on June 22, 2010, at 75 FR 35520, to reduce exposure to high short-term (five minutes to 24 hours) concentrations of SO<sub>2</sub>. U.S. EPA revoked the two existing primary standards of 140 ppb evaluated over 24 hours and 30 ppb evaluated over a year because they did not supplement protection of public health given a one-hour standard of 75 ppb. The form used to determine if an area meets the standard is the three year average of the ninety-ninth percentile of the annual distribution of daily maximum one-hour concentrations. The deadline for states to implement monitoring network revisions for the one-hour standard is January 1, 2013.

IDEM is proposing to amend [326 IAC 1-3-4](#) to incorporate portions of 40 CFR 50.5 to update its references to the national secondary ambient air quality standard for sulfur oxides (sulfur dioxide). By incorporating these federal regulations, this rulemaking helps to ensure that state rules are consistent with federal rules.

Particulate matter is the generic term for a broad class of chemically and physically diverse substances that exist as discrete particles, liquid droplets, or solids, over a wide range of sizes. Particles originate from a variety of anthropogenic stationary and mobile sources as well as from natural sources. Particles may be emitted directly or formed in the atmosphere by transformations of gaseous emissions such as sulfur oxides, nitrogen oxides, and volatile organic compounds. The chemical and physical properties of particulate matter vary greatly with time, region, meteorology, and source category, thus complicating the assessment of health and welfare effects.

U.S. EPA revised the level of the 24 hour standard for particulate matter with an aerodynamic diameter less than or equal to 2.5 microns (PM<sub>2.5</sub>), or fine particles, to 35 µg/m<sup>3</sup> on October 17, 2006, published at 71 FR 61144. The revised standard provides increased protection against health effects associated with short-term exposure. In the same action, U.S. EPA retain the annual PM<sub>2.5</sub> standard at 15 µg/m<sup>3</sup>.

In this rulemaking, IDEM is proposing to revise the 24 hour PM<sub>2.5</sub> standard to 35 µg/m<sup>3</sup> in its rules. Revising the 24 hour PM<sub>2.5</sub> standard will ensure consistency with federal regulations.

U.S. EPA revoked the annual secondary standard for particulate matter with an aerodynamic diameter less than or equal to 10 microns (PM<sub>10</sub>), or coarse particles, on October 17, 2006, published at 71 FR 61144. U.S. EPA has indicated that the available evidence does not suggest an association between long-term exposure to coarse particles at current ambient levels and detrimental health effects. In the same action, U.S. EPA retained the 24 hour PM<sub>10</sub> standard at 150 µg/m<sup>3</sup> to protect against the health effects associated with short-term exposure to coarse particles.

In this rulemaking, IDEM is proposing to remove the annual PM<sub>10</sub> secondary standard from its rules. Removing the annual PM<sub>10</sub> secondary standard from Indiana's rules will ensure consistency with federal

regulations and will eliminate unnecessary requirements for regulated sources and IDEM.

IDEM is also proposing to add a definition for PM<sub>2.5</sub> to its rules concerning attainment status designations at [326 IAC 1-4-1](#) for purposes of clarification.

#### **[IC 13-14-9-4](#) Identification of Restrictions and Requirements Not Imposed under Federal Law**

No element of the draft rule imposes either a restriction or a requirement on persons to whom the draft rule applies that is not imposed under federal law. This draft rule imposes no restrictions or requirements because it is a direct adoption of federal requirements that are applicable to Indiana and contains no amendments that have a substantive effect on the scope or application of the federal rule.

#### **Potential Fiscal Impact**

This rulemaking will remove the annual PM<sub>10</sub> secondary standard from Indiana's rules. This will ensure consistency with federal regulations and will eliminate unnecessary requirements for regulated sources and IDEM. Specifically, applicants for Title V and other designated air permits will be able to discontinue modeling for annual PM<sub>10</sub> as part of their air quality analysis. This will save regulated sources and IDEM extra time and cost.

#### **Public Participation and Workgroup Information**

At this time, no workgroup is planned for the rulemaking. If you feel that a workgroup or other informal discussion on the rule is appropriate, please contact Ryan Knapick, Rule and State Implementation Plan Development Section, Office of Air Quality at (317) 232-8229 or (800) 451-6027 (in Indiana).

#### **Small Business Assistance Information**

IDEM established a compliance and technical assistance (CTAP) program under [IC 13-28-3](#). The program provides assistance to small businesses and information regarding compliance with environmental regulations. In accordance with [IC 13-28-3](#) and [IC 13-28-5](#), there is a small business assistance program ombudsman to provide a point of contact for small businesses affected by environmental regulations. Information on the CTAP program, the monthly CTAP newsletter, and other resources available can be found at:

[www.in.gov/idem/ctap](http://www.in.gov/idem/ctap)

For purposes of [IC 4-22-2-28.1](#), the Small Business Regulatory Coordinator for this rule is:

Jessica Faust-Hamblin  
IDEM Small Business Regulatory Coordinator  
MC 60-04 IGCS W041  
100 North Senate Avenue  
Indianapolis, IN 46204-2251  
(317) 232-8172 or (800) 988-7901  
[ctap@idem.in.gov](mailto:ctap@idem.in.gov)

For purposes of [IC 4-22-2-28.1](#), the Small Business Ombudsman designated by [IC 5-28-17-5](#) is:

Eric P. Shields  
Indiana Economic Development Corporation  
One North Capitol, Suite 700  
Indianapolis, IN 46204  
(317) 234-3997  
[smallbizombudsman@iedc.in.gov](mailto:smallbizombudsman@iedc.in.gov)

Resources available to regulated entities through the small business ombudsman include the ombudsman's duties stated in [IC 5-28-17-5](#), specifically [IC 5-28-17-5\(9\)](#), investigating and attempting to resolve any matter regarding compliance by a small business with a law, rule, or policy administered by a state agency, either as a party to a proceeding or as a mediator.

The Small Business Assistance Program Ombudsman is:

Brad Baughn  
IDEM Small Business Assistance Program Ombudsman  
MC 50-01 IGCN 1301  
100 North Senate Avenue  
Indianapolis, IN 46204-2251  
(317) 234-3386 or (800) 451-6027  
[bbaughn@idem.in.gov](mailto:bbaughn@idem.in.gov)

#### **FINDINGS**

The commissioner of IDEM has prepared findings regarding rulemaking on the ambient air quality standards as required by federal rule. These findings are prepared under [IC 13-14-9-8](#) and are as follows:

- (1) This rule is the direct adoption of federal requirements that are applicable to Indiana, and it contains no amendments that have a substantive effect on the scope or intended application of the federal rule.
- (2) Indiana is required by federal law to adopt ambient air quality standards as established by the United States Environmental Protection Agency.
- (3) The environment and persons regulated or otherwise affected by the proposed rule will benefit from prompt adoption of this rule because it provides consistency between federal rules and the state rules

regarding the ambient air quality standards.

(4) I have determined that, under the specific circumstances pertaining to this rule, there would be no reasonably anticipated benefit to the environment or to persons regulated or otherwise affected by the proposed rule from the first or second public written comment period under [IC 13-14-9-3](#) or [IC 13-14-9-4](#), or from the first public hearing under [IC 13-14-9-5\(a\)\(1\)](#).

(5) The draft rule is hereby incorporated into these findings.

---

Thomas W. Easterly  
Commissioner  
Indiana Department of Environmental Management

### REQUEST FOR PUBLIC COMMENTS

This notice requests the submission of comments on the draft rule language, including suggestions for specific revisions to language to be contained in the draft rule. Comments may be submitted in one of the following ways:

(1) By mail or common carrier to the following address:

LSA Document #12-510 2012 NAAQS Update  
Ryan Knapick Mail Code 61-50  
Rule and State Implementation Plan Development Section  
Office of Air Quality  
Indiana Department of Environmental Management  
100 North Senate Avenue  
Indianapolis, IN 46204-2251

(2) By facsimile to (317) 233-5967. Please confirm the timely receipt of faxed comments by calling the Rule and State Implementation Plan Development Section at (317) 234-6530.

(3) By electronic mail to [rknapick@idem.in.gov](mailto:rknapick@idem.in.gov). To confirm timely delivery of submitted comments, please request a document receipt when sending the electronic mail. **PLEASE NOTE: Electronic mail comments will NOT be considered part of the official written comment period unless they are sent to the email address indicated in this notice.**

(4) Hand delivered to the receptionist on duty at the tenth floor reception desk, Office of Air Quality, Indiana Government Center North, 100 North Senate Avenue, Indianapolis, Indiana.

Regardless of the delivery method used, in order to properly identify each comment with the rulemaking action it is intended to address, each comment document must clearly specify the LSA document number of the rulemaking.

### COMMENT PERIOD DEADLINE

All comments must be postmarked, faxed, or time stamped no later than October 12, 2012. Hand-delivered comments must be delivered to the appropriate office by 4:45 p.m. on the above-listed deadline date.

Additional information regarding this action may be obtained from Ryan Knapick, Rule and State Implementation Plan Development Section, Office of Air Quality, (317) 232-8229 or (800) 451-6027 (in Indiana).

### DRAFT RULE

SECTION 1. [326 IAC 1-3-4](#) IS AMENDED TO READ AS FOLLOWS:

#### [326 IAC 1-3-4](#) Ambient air quality standards

**Authority:** [IC 13-14-8](#); [IC 13-17-3-4](#); [IC 13-17-3-11](#)

**Affected:** [IC 13-15](#); [IC 13-17](#)

Sec. 4. (a) All measurements of air quality that are expressed as mass per unit volume, other than for the particulate matter (PM<sub>2.5</sub>) standards contained in subsection (b)(8) and lead (Pb) standards contained in subsection (b)(6), shall be corrected to a reference temperature of twenty-five (25) degrees Celsius and a reference pressure of seven hundred sixty (760) millimeters of mercury (one thousand thirteen and two-tenths (1,013.2) millibars), as micrograms per cubic meter (µg/m<sup>3</sup>). Measurements of PM<sub>2.5</sub>, for purposes of comparison to the standards contained in subsection (b)(8), and Pb, for purposes of comparison to the standards contained in subsection (b)(6), shall be reported based on actual ambient air volume measured at the actual ambient temperature and pressure at the monitoring site during the measurement period.

(b) Ambient air quality standards are as follows:

- (1) Sulfur oxides as sulfur dioxide ( $\text{SO}_2$ ) requirements are as follows:
- (A) For the primary one (1) hour ambient air quality standard, the maximum permissible ambient air quality level shall be seventy-five (75) parts per billion (ppb). The one (1) hour standard is attained when the three (3) year average of the annual ninety-ninth percentile of the daily maximum one (1) hour average concentration is less than or equal to seventy-five (75) ppb, as determined in accordance with 40 CFR 50, Appendix T\* ~~added at 75 FR 35595-35597~~, and measured in the ambient air as  $\text{SO}_2$  by a reference method based on 40 CFR 50, Appendix A\*, ~~redesignated Appendix A-2 at 75 FR 35595 or Appendix A-1\*, added at 75 FR 35593-35595~~, **40 CFR 50, Appendix A-1\* or 40 CFR 50, Appendix A-2\***, or an equivalent method designated in accordance with 40 CFR 53\*. ~~as amended at 75 FR 35597-35601.~~
- (B) For the secondary standard, the following value shall represent the maximum permissible ambient air quality level: one thousand three hundred (1,300)  $\mu\text{g}/\text{m}^3$  (five-tenths (0.5) ppm) maximum three (3) hour concentration not to be exceeded more than once per year. The three (3) hour averages shall be determined from successive nonoverlapping three (3) hour blocks starting at midnight each calendar day **and shall be rounded to one (1) decimal place (fractional parts equal to or greater than five-hundredths (0.05) ppm shall be rounded up).** Sulfur oxides shall be measured in the ambient air as  $\text{SO}_2$  by the reference method described in 40 CFR 50, Appendix A-1\* or 40 CFR 50, Appendix A-2\*, or by ~~an~~ **an** equivalent method designated in accordance with 40 CFR 53\*. **To demonstrate attainment, the second-highest three (3) hour average must be based upon hourly data that are at least seventy-five percent (75%) complete in each calendar quarter. A three (3) hour block average shall be considered valid if:**
- (i) all three (3) hourly averages for the three (3) hour period are available; or
- (ii) only one (1) or two (2) hourly averages are available, but the three (3) hour average would exceed the level of the standard when zeros are substituted for the missing values, subject to the rounding rule of this clause.
- In all cases, the three (3) hour block average shall be computed as the sum of the hourly averages divided by three (3).**
- (C)  $\text{SO}_2$  values may be converted to ppm using the conversion factor two thousand six hundred twenty (2,620)  $\mu\text{g}/\text{m}^3 = \text{one (1) ppm}$ .
- (2) Total suspended particulates (TSP) requirements are as follows:
- (A) For primary standards, the following values shall represent the maximum permissible ambient air quality levels:
- (i) Seventy-five (75)  $\mu\text{g}/\text{m}^3$  annual geometric mean.
- (ii) Two hundred sixty (260)  $\mu\text{g}/\text{m}^3$  maximum twenty-four (24) hour average concentration not to be exceeded more than one (1) day per year.
- (B) For secondary standards, the following value shall represent maximum permissible ambient air quality levels: one hundred fifty (150)  $\mu\text{g}/\text{m}^3$  maximum twenty-four (24) hour average concentration not to be exceeded more than one (1) day per year.
- (3) Carbon monoxide (CO) requirements are as follows:
- (A) For primary and secondary standards, the following values shall represent the maximum permissible ambient air quality levels:
- (i) Ten (10) milligrams per cubic meter ( $\text{mg}/\text{m}^3$ ) (ten thousand (10,000)  $\mu\text{g}/\text{m}^3$ ) (nine (9) ppm) maximum eight (8) hour average concentration not to be exceeded more than once per year.
- (ii) Forty (40)  $\text{mg}/\text{m}^3$  (forty thousand (40,000)  $\mu\text{g}/\text{m}^3$ ) (thirty-five (35) ppm) maximum one (1) hour average concentration not to be exceeded more than once per year.
- (B) CO values may be converted to ppm using the conversion factor one thousand one hundred forty-five (1,145)  $\mu\text{g}/\text{m}^3 = \text{one (1) ppm}$ .
- (4) Ozone ( $\text{O}_3$ ) requirements are as follows:
- (A) For the one (1) hour ozone standards, the level of the one (1) hour primary and secondary ambient air quality standards for ozone measured by a reference method based on 40 CFR 50, Appendix D\* and designated in accordance with 40 CFR 53\* is twelve-hundredths (0.12) ppm (two hundred thirty-five (235)  $\mu\text{g}/\text{m}^3$ ). The standard is attained when the expected number of days per calendar year with maximum hourly average concentrations above twelve-hundredths (0.12) ppm (two hundred thirty-five (235)  $\mu\text{g}/\text{m}^3$ ) is equal to or less than one (1) as determined by 40 CFR 50, Appendix H\*.
- (B) For the eight (8) hour ozone standards, the:
- (i) level of the eight (8) hour primary and secondary ambient air quality standards for ozone, measured by a reference method based on 40 CFR 50, Appendix D\* and designated in accordance with 40 CFR 53\*, is eight-hundredths (0.08) ppm, daily maximum eight (8) hour average; and
- (ii) eight (8) hour primary and secondary ozone ambient air quality standards are met at an ambient air quality monitoring site when the average of the annual fourth highest daily maximum eight (8) hour average ozone concentration is less than or equal to eight-hundredths (0.08) ppm as determined in accordance with 40 CFR 50, Appendix I\*.



(C)  $O_3$  values may be converted to ppm using the conversion factor one thousand nine hundred sixty-five (1,965)  $\mu\text{g}/\text{m}^3 = 1.0$  ppm.

(5) Nitrogen dioxide ( $\text{NO}_2$ ) requirements are as follows:

(A) For the primary one (1) hour ambient air quality standard, the maximum permissible ambient air quality level shall be one hundred (100) ppb, one (1) hour average concentration, measured in the ambient air as  $\text{NO}_2$ . The one (1) hour standard is attained when the three (3) year average of the annual ninety-eighth percentile of the daily maximum one (1) hour average concentration is less than or equal to one hundred (100) ppb, as determined in accordance with 40 CFR 50, Appendix S\*. ~~added at 75 FR 6532-6534.~~

(B) For ~~the annual primary and secondary standards, standard,~~ the following value shall represent the maximum permissible ambient air quality level: one hundred (100)  $\mu\text{g}/\text{m}^3$  (fifty-three thousandths (0.053) ppm) annual arithmetic mean ~~average~~ concentration in a calendar year. **The annual primary standard is attained when the annual average concentration in a calendar year is less than or equal to fifty-three (53) ppb, as determined in accordance with 40 CFR 50, Appendix S\* for the annual standard.**

**(C) For the annual secondary standard, the following value shall represent the maximum permissible ambient air quality level: one hundred (100)  $\mu\text{g}/\text{m}^3$  (fifty-three thousandths (0.053) ppm) annual arithmetic mean concentration in a calendar year. The secondary standard is attained when the annual arithmetic mean concentration in a calendar year is less than or equal to fifty-three thousandths (0.053) ppm, rounded to three (3) decimal places (fractional parts equal to or greater than five ten-thousandths (0.0005) ppm must be rounded up). To demonstrate attainment, an annual mean must be based upon hourly data that are at least seventy-five percent (75%) complete or upon data derived from manual methods that are at least seventy-five percent (75%) complete for the scheduled sampling days in each calendar quarter.**

~~(C) (D)~~  $\text{NO}_2$  values may be converted to ppm using the conversion factor one thousand eight hundred eighty (1,880)  $\mu\text{g}/\text{m}^3 = \text{one (1) ppm}$ .

**(E) The levels of the standards shall be measured by:**

**(i) a reference based on 40 CFR 50, Appendix F\*; or**

**(ii) an equivalent method designated in accordance with 40 CFR 53\*.**

(6) Pb: For primary and secondary standards, the following value shall represent the maximum permissible ambient air quality level: fifteen-hundredths (0.15)  $\mu\text{g}/\text{m}^3$ , arithmetic mean concentration over a three (3) month period. The standards are attained when the maximum arithmetic three (3) month mean concentration for a three (3) year period is less than or equal to fifteen-hundredths (0.15)  $\mu\text{g}/\text{m}^3$ , as determined in accordance with 40 CFR 50, Appendix R\* and measured in the ambient air as Pb by either:

(A) a reference method based on 40 CFR 50, Appendix G\*, and designated in accordance with 40 CFR 53\*; or

(B) an equivalent method designated in accordance with 40 CFR 53\*.

(7)  $\text{PM}_{10}$ : For primary and secondary standards, ~~the following values shall represent the maximum permissible ambient air quality levels:~~ **level is**

~~(A) Fifty (50)  $\mu\text{g}/\text{m}^3$  annual arithmetic mean. The standards are attained when the expected annual arithmetic mean concentration, as determined in accordance with 40 CFR 50, Appendix K\*, is less than or equal to fifty (50)  $\mu\text{g}/\text{m}^3$ .~~

~~(B) one hundred fifty (150)  $\mu\text{g}/\text{m}^3$  maximum twenty-four (24) hour average concentration. The standards are attained when the expected number of days per calendar year with a twenty-four (24) hour average concentration above one hundred fifty (150)  $\mu\text{g}/\text{m}^3$ , as determined in accordance with 40 CFR 50, Appendix K\*, is equal to or less than one (1).~~

(8)  $\text{PM}_{2.5}$ : For primary and secondary standards, the following values shall represent the maximum permissible ambient air quality levels:

(A) Fifteen (15) micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ) annual arithmetic mean concentration. The standards are attained when the annual arithmetic mean concentration is less than or equal to fifteen (15)  $\mu\text{g}/\text{m}^3$ , as determined in accordance with 40 CFR 50, Appendix N\* and measured in the ambient air as  $\text{PM}_{2.5}$  by either:

(i) a reference method based on 40 CFR 50, Appendix L\*, and designated in accordance with 40 CFR 53\*; or

(ii) an equivalent method designated in accordance with 40 CFR 53\*.

~~(B) Sixty-five (65)  $\mu\text{g}/\text{m}^3$  twenty-four (24) hour average concentration. The standards are attained when the ninety-eighth percentile twenty-four (24) hour concentration is less than or equal to sixty-five (65)  $\mu\text{g}/\text{m}^3$ , as determined in accordance with 40 CFR 50, Appendix N\* and measured in the ambient air as  $\text{PM}_{2.5}$  by either:~~

~~(i) a reference method based on 40 CFR 50, Appendix L\*, and designated in accordance of 40 CFR 53\*; or~~

~~(ii) an equivalent method designated in accordance with 40 CFR 53\*.~~

\*These documents are incorporated by reference. Copies may be obtained from the Government Printing Office, 732 North Capitol Street NW, Washington, D.C. 20401 or are available for review and copying at the Indiana Department of Environmental Management, Office of Air Quality, Indiana Government Center North, Tenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204.

(Air Pollution Control Board; [326 IAC 1-3-4](#); filed Mar 10, 1988, 1:20 p.m.: 11 IR 2378; filed Apr 13, 1988, 3:35 p.m.: 11 IR 3020; readopted filed Jan 10, 2001, 3:20 p.m.: 24 IR 1477; filed May 21, 2002, 10:20 a.m.: 25 IR 3055; filed Mar 9, 2004, 3:45 p.m.: 27 IR 2224; filed Dec 20, 2004, 2:15 p.m.: 28 IR 1471; filed Mar 6, 2006, 3:00 p.m.: 29 IR 2179; filed Sep 24, 2010, 1:44 p.m.: [20101020-IR-326100127FRA](#); filed Feb 9, 2011, 10:29 a.m.: [20110309-IR-326100495FRA](#))

SECTION 2. [326 IAC 1-4-1](#) IS AMENDED TO READ AS FOLLOWS:

#### **Rule 4. Attainment Status Designations**

##### **[326 IAC 1-4-1](#) Definitions**

**Authority:** [IC 13-14-8](#); [IC 13-17-3-4](#); [IC 13-17-3-11](#)

**Affected:** [IC 13-15](#); [IC 13-17](#)

Sec. 1. The following definitions apply throughout this rule:

- (1) "SO<sub>2</sub>" means sulfur dioxide.
- (2) "CO" means carbon monoxide.
- (3) "O<sub>3</sub>" means ozone.
- (4) "PM<sub>10</sub>" has the meaning set forth in [326 IAC 1-2-52.4](#).
- (5) "NO<sub>x</sub>" means nitrogen ~~dioxides~~ **dioxide**.
- (6) "Pb" means lead.
- (7) "PM<sub>2.5</sub>" has the meaning set forth in [326 IAC 1-2-52.2](#).

(Air Pollution Control Board; [326 IAC 1-4-1](#); filed Mar 10, 1988, 1:20 p.m.: 11 IR 2379; filed Aug 9, 1991, 11:00 a.m.: 14 IR 2218; filed Dec 30, 1992, 9:00 a.m.: 16 IR 1382; filed Apr 18, 1995, 3:00 p.m.: 18 IR 2220; filed Oct 22, 1997, 8:45 a.m.: 21 IR 932; filed Apr 17, 1998, 9:00 a.m.: 21 IR 3342; filed Apr 29, 1998, 3:15 p.m.: 21 IR 3341; filed May 21, 2002, 10:20 a.m.: 25 IR 3056; filed Nov 15, 2002, 11:17 a.m.: 26 IR 1077; filed Dec 1, 2003, 10:00 a.m.: 27 IR 1167; filed Nov 12, 2004, 12:15 p.m.: 28 IR 1182; filed Sep 26, 2006, 10:03 a.m.: [20061025-IR-326060018FRA](#); filed Sep 13, 2007, 1:57 p.m.: [20071010-IR-326070024FRA](#); filed Dec 26, 2007, 1:43 p.m.: [20080123-IR-326070308FRA](#))

##### **[Notice of Public Hearing](#)**

Posted: 09/12/2012 by Legislative Services Agency

An [html](#) version of this document.